

## **Remarks**

Claims 1-21 are in the case. Claims 1-5 stand rejected. The grounds of rejection are traversed and reconsideration is respectfully requested. New claims 6-21 are presented for consideration.

## **Objections to the Drawings**

The Examiner points out that the drawings fail to comply with 37 CFR 1.84(p)(5) because Figures 31-33 include reference numbers 148 and 168, which were not mentioned in the description. The original description of Figures 31-33 inadvertently referred to feet 48 and locking fingers 68, even though Figures 31-33 use reference numbers 148 and 168 to refer to the feet and locking fingers, respectively. Applicant has elected to address this objection by amending the detailed description to mention 148 and 168, as set forth in the enclosed amendments to the specification. As discussed below, the inadvertent omission of reference numbers 148 and 168 from the description may have contributed to a misunderstanding of the claimed invention vis-à-vis the cited references.

## **Claims Rejections – 35 USC § 103**

Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable in view of Amstutz (U.S. Pat. No. 6,063,124). Applicant respectfully traverses on grounds that a prima facie case of obviousness has not been established. As discussed in further detail below, it is respectfully suggested that Amstutz is being misinterpreted. The configurations and functions of acetabular component insertion and extraction tools are difficult to visualize and fully appreciate without access to physical embodiments of the tools, but it is hoped that the amendments to the specification with regard to Figures 31-33, along with the discussion below, will serve to better differentiate the claimed invention from Amstutz. The Amstutz reference does not describe all of the claimed elements, and there is no suggestion, teaching or motivation to supply Amstutz with the missing elements, other than applicant's specification.

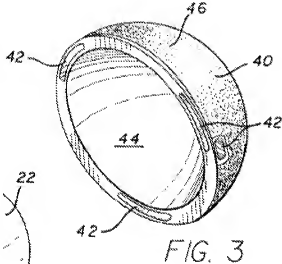
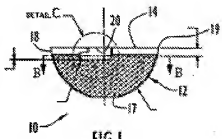
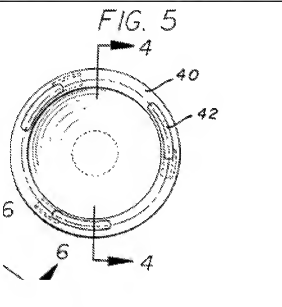
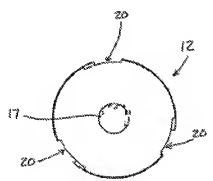
The Amstutz reference is owned by Wright Medical Technology, Inc., the assignee of the present application. Applicant submits that the claimed invention represents an improvement over the Amstutz device, rather than an obvious variation. Amstutz discloses a different type of

connection between the acetabular component and the instrument. With reference to applicant's Figures 31-33, Amstutz does not disclose a locking finger 168, much less a locking finger 168 having the claimed characteristics. As shown in applicant's Figure 33, applicant's locking finger 168 is normally biased into a portion of the recess 20 of the acetabular component that is not occupied by a foot member 148. As indicated in applicant's Figure 33, the side-by-side placement of the locking finger 168 and foot member 148 in the recess 20 prevents rotation of the engagement plate 44 about its central longitudinal axis, such that the acetabular component 10 is locked to the tool 27 (designated 127 in Figures 31-33). In contrast, in Figure 32, the locking finger 168 is shown in a retracted position in which the locking finger 168 no longer occupies the portion of the recess 20 that is not occupied by the foot member 148. In the retracted configuration of Figure 32, the acetabular component 10 can be removed from the tool 27 simply by rotating the engagement plate 44 about its central longitudinal axis until the foot member 148 occupies the entry portion 22 of the recess 20, and then withdrawing the foot member 148 from the recess 20.

As far as applicant can determine, Amstutz does not disclose a locking finger 168, and therefore at least one element of the claimed invention is not found in the cited reference. In Exhibit B to the office action, the Examiner designates an internal shoulder portion of Amstutz Figure 15 as being the locking finger 168. Applicant disagrees with this characterization of Amstutz, and accordingly requisites an explanation as to how the designated portion of Amstutz Figure 15 can be interpreted as providing the locking finger function of applicant's Claim 1.

With regard to Figure 4, the Examiner takes the position that Amstutz discloses the thin-walled, partial spherical body in element 40 and an articular surface for a femoral head in col. 4, lines 28-42. (Figures 2, 3). As noted above, the Amstutz reference is owned by Wright Medical Technology, Inc., the assignee of the present application. Applicant submits that Claim 4 represents an improvement over the acetabular component shown in Amstutz Figures 3-6, rather than an obvious variation. Applicant has amended Claim 4 to clarify how the claimed invention improves upon the configuration of the Amstutz acetabular component. Amended Claim 4 specifies that each recess 20 has a "an open outer periphery extending from said entry portion to said engagement portion," by which applicant means the open recesses 20 that are shown most clearly in applicant's Figures 1-3 and 31-33. The open recesses represent an improvement over the Amstutz acetabular component because they allow the acetabular component of the present

invention to have a substantially thinner wall. The improvement can be visualized by comparing Amstutz Figures 3 and 5 with Figures 1 and 3 of the present application:

AMSTUTZ	PRESENT APPLICATION
 <p>FIG. 3</p>	 <p>FIG. 1</p>
 <p>FIG. 5</p>	 <p>Fig. 3</p>

In Amstutz Figures 3 and 5, the recess 42 does not have an “open outer periphery extending from said entry portion to said engagement portion.” As can be seen in the top view of Amstutz Figure 5, the outer wall is continuous along the outer periphery of the entry portion of the recess 42. As can be seen in the perspective view of Amstutz Figure 3, the continuous outer wall forms an enclosed portion of the recess 42 between the entry portion and the engagement

portion. In contrast, in the bottom view of applicant's Figure 3, there is a break in the outer wall at the location of the recesses 20. In Applicant's Figure 1, it can be further seen that the open area extends from the entry portion to the engagement portion.

Applicant described the importance of the claimed improvements as follows:

The recesses 20 are open along the peripheral end surface and the outer surface of body 12, and the body 12 being thin-walled minimizes the size of the cavity required to be formed in the acetabulum for a body of given articular surface area. The length of the engagement portions 24 is of a size to simultaneously receive the foot of an engagement protrusion and a locking finger of a locking member of an insertion and extraction tool as explained below.

(¶0052 of applicant's published application). Thus, by opening the periphery of the recess, applicant is able to place the recess along the periphery, even though the cup has a thin wall. Further, as can be seen in applicant's Figures 31-33, the claimed configuration contributes to the use of the holder tool 27, 127.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Amstutz in view of Ostiguy Jr. et al. (U.S. Pat. No. 6,162,256). The Examiner admits that Amstutz does not disclose a specific thickness for the body of the acetabular component. The Examiner interprets Ostiguy Jr. et al. as teaching a body with a thickness of 3-6 mm in col. 4, lines 4-5 and 14-15. The Examiner concludes that it would have been obvious to one of ordinary skill in the art at the time the invention was made to adjust the thickness of the acetabular component to 3-6 mm as needed to fit a particular patient's physiology. Applicant notes that the above cited portions of Ostiguy do not discuss the thickness of the acetabular component, but rather the height 30 and depth 32 of groove 24 (see Figure 4) and the width 38 and depth 40 of recess 28 (see Figure 7A). Applicant was unable to locate a teaching in Ostiguy concerning wall thickness, and therefore requests clarification.

New claims 6-21 are presented for consideration. New claims 6-21 all depend directly or indirectly from either claim 1 or claim 4, both of which are believed to be in condition for allowance. The configuration of claim 6, which is shown in Figures 19 and 32-33, contributes to the thin walled design by providing feet that engage the recess structures without extending beyond the rim of the acetabular component. Claims 7-8 and 16-20 distinguish from two part acetabular component implants, in which a shell component is configured for attachment to the acetabular bone and is further configured for receipt of a separate liner or bearing component.

Support for claims 7-8 and 16-20 is found at page 9, lines 14-17 of the specification (§0052 of the published application), and is represented in Figure 1 by the pattern on the outer surface of the acetabular component. Support for claims 9, 13, 15 and 21 is found in Figures 2-3. Support for claims 10-12 is found in Figures 7, 17-21, and 31-33, and particularly Figure 18. The tapered finger configuration of claims 10-12 improves the locking engagement between the tool and the acetabular component.

## **Conclusion**

Applicant suggests claims 1-21 are now in a condition for allowance. This response has been filed with a petition for a one month extension of time. It is believed that no further extensions of time are required, but if an extension is required, applicant hereby requests an appropriate extension of time. It is further believed that no fees are due, but if any fees or credits are due, the Commissioner is authorized to charge or deposit them to Deposit Account No. 502795.

Respectfully submitted,

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